

the latter, consisting on each side of an internal, larger, auriform labyrinthic gill, and an external, small, almost biscuit-shaped one; on the gill-arches there is moreover a discoid, shortly pedunculated piece of cartilage, but which is situated apart from the cavity of the above organ. A simple swimming-bladder. Stomach saciform, and the simply coiled intestine has at its commencement a single rudimentary cæcum.

Ctenopoma multispinis, Peters. Pl. XI. fig. 3.

Form of the body extended; anal fin more than half as long as the dorsal fin, both furnished with elongated soft rays which form an acute posterior angle to these fins. Foramina exist in the infraorbital bones, as also laterally below the inferior maxilla. Two larger scales above and at the base of the pectoral fin. B. 6; D. 17, 9; V. 1, 5; A. 10, 9; P. 14; C. 14—15. Colour dark green above, becoming yellowish below. The body is covered with dark spots in two-thirds of its breadth, as are also the dorsal and caudal fins. Length 3 inches.

EXPLANATION OF PLATE XI.

Fig. 3. Animal of the natural size.

Fig. 4. *a*, Interior large labyrinthic gill; *b*, exterior small labyrinthic gill; *c*, discoid petiolated accessory organ.

XLII.—*Descriptions of new or imperfectly described Lepidopterous Insects.* By EDWARD DOUBLEDAY, Esq., F.L.S., Assistant in the Zoological Department of the British Museum, &c.

[Continued from p. 176.]

Fam. PIERIDÆ.

Genus EUTERPE.

Eut. Dysoni. Alis omnibus supra nigris: *maris* fascia lata transversa alba: *feminae* basi alba: marginibus externis albo maculatis; subtus nigro, brunneo, alboque variegatis; posticarum basi coccinea. Exp. alar. $2\frac{1}{4}$ unc. vel 57 mill.

Hab. Venezuela.

Anterior wings elongate, trigonate, somewhat truncate at the apex, the outer margin sinuate, dentate. Above, in the male, black, with a transverse white band, commencing near the costa beyond the cell, macular at its origin, widening towards the inner margin, dentate externally; between this band and the outer margin is a series of four or five whitish dots; cilia fuscous. Posterior wings with the anterior margin deeply emarginate near the base, the outer margin sinuate, dentate, the tooth in which

the second median nervule terminates being elongate: pearly white, slightly tinged with yellow and sprinkled with black scales near the base; the outer margin broadly black, marked in the sinuses with white. Cilia fuscous, spotted with white.

Below, the anterior wings have the cell fuscous, darkest externally; the fuscous colour extending beyond the cell; the outer margin fuscous, with a series of white dots corresponding to those of the upper surface, and the apex varied with brown, white and yellow, the whole of the other parts of the wing pearly white. Posterior wings pale brown, the costa at the base and a spot at the origin of the costal and subcostal nervures crimson; a macular band commences on the costa at the base and terminates on the inner margin slightly below the middle, describing about two-thirds of a circle; this band is composed of numerous, irregular white spots, divided by the nervures, each spot is marked by a yellow vitta and bounded internally by an irregular or cuneiform black spot and externally by a waved black striga; the spot above the costal nervure is divided by a small black patch: between this band and the margin is a broken white band distinctly indicated on the inner and outer angle, nearly obsolete in the middle of its course: between the nervules a series of fuscous clouds more or less divided by a central yellow line.

Head and antennæ fuscous above, paler below.

Thorax and base of abdomen clothed with long ashy hairs.

Abdomen ashy white.

The female differs in having the basal half of the anterior wings entirely white except a powdering of fuscous at the base and along the costa; the outer margin black, the black extending into the cell, beyond which is a short macular band divided into four parts by the nervules, and beyond this a submarginal series of white dots as in the male.

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I have named this beautiful species after its discoverer, Mr. D. Dyson, who has for the past year been indefatigably exploring the entomology of Venezuela. The female has a striking resemblance above to *Papilio Endochus*, but the black border is much wider.

Eut. Teutila. Alis omnibus supra fuscis, fascia communi, media, maculari, punctisque submarginalibus albis: subtus anticis fascia media, maculari alba; punctis vittisque albis, aurantiacisque: posticis nigro, aurantiaco, alboque variegatis. Exp. alar. $2\frac{1}{4}$ unc. vel 56 mill.

Hab. Mexico.

Above, all the wings fuscous, slightly irrorated at the base with whitish scales, crossed by a narrow whitish band, commencing in the cell of the anterior wings a short distance from the

disco-cellular nervule, and crossing the posterior wings about the middle of the cell; broadest on the anterior wings, slightly tinted with buff on the abdominal margin; divided by the nervures which are fuscous. Beyond this band, close to the costa of the anterior wings, are two whitish dots, the upper elongate, the lower nearly round; separated only by the subcostal nervule. Near the margin is a series of dots between the nervules, composed of whitish scales not very closely placed; the dots nearest the apex of the anterior wings most distinct. Cilia fuscous, spotted with white.

Below, all the wings are fuscous: the anterior have the markings as above but more distinct, the spots towards the apex are tinged with yellow, and between the nervules near the apex are three or four delicate orange vittæ, becoming white where they touch the margin. Costa at the base whitish. The posterior wings have the space between the costal nervure and the costa white, tinged with orange near the base; at the base of the wings itself is a white dot bordered internally with a small tuft of crimson hairs. Before the middle of the wing is a band corresponding in position with that of the upper surface, composed of six orange spots more or less margined with white, the outer elongate, the second subtriangular, the third subquadrate, connected anteriorly with an orange vitta, the others smaller, more or less rounded, all resting on a black cloud. Between this band and the base are five orange spots near the inner margin and a single one on the costa. At the extremity of the cell is an orange vitta divided by the disco-cellular nervule, and between the cell and the outer margin a series of sagittate spots, orange internally, white externally, and on the margin itself between the nervules a series of similarly coloured vittæ.

Head, thorax and abdomen black, tinged with gray, shoulder slightly marked with orange.

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Eut. Toca. Alis omnibus supra nigris, fascia media communi, maculari, serieque punctorum submarginali albis: subtus anticis vittis tribus baseos, fascia media alteraque submarginali macularibus albis, margine ipso albo flavoque maculato; posticis pallide stramineis, flavo, nigroque variegata. Exp. alar. $1\frac{3}{4}$ unc. vel 45 mill.

Hab. Bolivia.

Above, all the wings black, with a common transverse band arising on the costa and traversing the wings to the abdominal margin; macular and narrow at its origin, gradually widening to the inner margin of the anterior wings, not macular and still

wider on the posterior, but suddenly narrowed just within the median nervule. Between this band and the margin a series of rounded white spots, least distinct on the posterior wings. Cilia of the anterior wings fuscous, dotted near the apex with white, cilia of the posterior white with black dots.

Below, the anterior wings have the median band nearly as above, but the part nearest the costa is tinged with yellow; the spot in the cell is larger, the submarginal spots are larger and form a macular band, the upper ones being yellow; the outer margin is marked between the nervules with short vittæ, those near the apex yellow, the hinder ones white. The base with a whitish vitta along the costa and two in the cell.

Posterior wings very pale straw-yellow; the precostal nervule bordered with black, a black spot pupilled with yellow between the base of the costal and subcostal nervures, a black patch near the abdominal margin, at the base marked with six yellow spots, the two inner ones extended to the margin; a series of cuneiform yellow spots across the wing beyond the middle, bordered internally with black, preceded by five yellow vittæ, of which the third extends nearly the whole length of the cell; a small round yellow dot in the black at the end of the cell, and a series of yellow wedge-shaped spots bordered by a deeply zigzag black line on the outer margin.

Head black, the vertex yellow, palpi yellow, with long black hairs. Antennæ annulated with white. Thorax black, with a yellow spot at the shoulders, clothed above with silvery gray hairs, below with pale yellow. Legs black, varied with gray. Abdomen black above, with a few gray scales and hairs, below whitish.

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Ent. Colla. Alis anticis supra nigro-fuscis, fascia transversa communi, maculari, sulphurea, serieque submarginali punctorum sulphureorum: subtus fuscis, fascia transversa, maculis submarginalibus, vittisque marginalibus sulphureis, nebulis cinereis. Exp. alar. $2\frac{1}{4}$ unc. vel 57 mill.

Hab. Bolivia.

Above, all the wings fuscous black, crossed on the anterior beyond the cell by a macular band, composed of rather elongate sulphur-coloured spots larger towards the inner margin, this band continued across the posterior wings before the middle, divided by the nervures. In the cell of the anterior wings is a small sulphur-coloured spot, and near the margin of both wings a series of round dots of the same colour between the nervules. The margin of the posterior wings has three or four small sulphur-coloured dots.

Below, the colour is rather paler, the macular band more marked on the anterior wings, less so on the posterior; the spots of the submarginal series are lunulate on the anterior wings, the upper ones margined with pale cinereous, those of the posterior margined by a dark cloud within and a pale cloud externally: the external margin of the anterior wings with a series of slender vittæ between the nervules, the posterior with a series of wedge-shaped spots in the same position: base of both wings with two or three yellow vittæ, those of the posterior with a crimson spot.

Head, thorax and abdomen black, the thorax below spotted with yellow.

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Eut. Pinava. Alis omnibus supra fuscis, fasciis duabus communibus macularibus ochraceis, serieque marginali punctorum ochraceorum; posticis purpurascenti-cinereis, fasciis duabus pallidis, maculis aliquot nigris flavisque. Exp. alar. $1\frac{3}{4}$ unc. vel 47 mill.

Hab. Bolivia.

Above, all the wings fuscous, traversed beyond the cell of the anterior by a macular band, narrow at the costa, enlarging towards the inner margin, composed of rather quadrate spots of an ochrey colour; continued across the posterior wings, where it is divided only by the nervures and a black line down the middle of the cell; occupying on these wings nearly the basal half of the wing, and extending along the abdominal margin almost to the anal angle. On the anterior wings is a series of round spots of the same colour about equally distant from the first band and the outer margin, and on the posterior wings in the same position a series of lunules likewise ochraceous. The extremity of the cell of the anterior wings has a single spot, and on the outer margin of both wings is a series of spots of the same colour.

Below, the anterior wings are paler, the marginal spots more distinct than near the apex. The posterior wings are ash-coloured, tinged with purple, pale at the base, traversed near the middle by a whitish band, spotted with yellow; and not far from the outer margin by a much-waved band of the same colour. The marginal and submarginal spots of the upper surface are reproduced more distinctly below, and are margined internally with black. Close to the base is a crimson spot, and two or three yellow ones are scattered over the basal half of the wings.

Head, thorax and abdomen black, mingled with gray.

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